EPA Question	Response	Records/Information Available
Section 1.0 - Respondent Information		
1. Provide the full legal, registered name and mailing address of Respondent.	Portland General Electric Company 121 SW Salmon Street Portland, OR 97204	
2. For each person answering these questions on behalf of Respondent, provide:		
Site Operator: Portland General Electric		
a. full name;	Arya Behbehani	
b. title;	Manager, Environmental Services	
c. business address; and	121 SW Salmon Street m/s 3WTCBR05 Portland, OR 97204	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503.464.8141 Electronic Mail Address: Arya.Behbehani@pgn.com Fax Number: 503.464.8527	
Site Consultant: URS Corporation		
a. full name;	David Weatherby, RG; Anne Gire	
b. title;	Senior Project Manager; Environmental Scientist	
c. business address: and	111 SW Columbia, Suite 1500 Portland, OR 97225-5850	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503.222.7200 Electronic Mail Address: David.Weatherby@urs.com; Anne.Gire@urs.com Fax Number: 503.222.4292	
3. If Respondent wishes to designate an individual for all future correspondence concerning this Site, please indicate here by providing that individual's name, address, telephone number, fax number, and, if available, electronic mail address.	Arya Behbehani Portland General Electric Manager, Environmental Services 121 SW Salmon Street Portland, OR 97204 Tel: 503.464.8141 Fax: 503.464.8527 Electronic Mail Address: Arya.Behbehani@pgn.com	

EPA Question	Response	Records/Information Available
Section 2.0 - Owner/Operator Information		
4. Identify each and every Property that Respondent currently owns, leases, operates on, or otherwise is affiliated or historically has owned, leased, operated on, or otherwise been affiliated with within the Investigation Area during the period of investigation (1937 to Present). Please note that this question includes any aquatic lands owned or leased by Respondent.		
h. Historically otherwise affiliated with	Employee interviews suggest that the Holman parking lot (directly across Water Avenue) was once purportedly used to store capacitors and salvage transformers. See Q04h_PGE Hawthorne Old Transformers.pdf	See Question 4 Attachment Q04h_PGE Hawthorne Old Transformers.pdf
5. Provide a brief summary of Respondent's relationship to each Property listed in response to Question 4 above, including the address, Multnomah County Alternative Tax lot Identification number(s), dates of acquisition, period of ownership, lease, operation, or affiliation, and a brief overview of Respondent's activities at the Properties identified.		
g. Activities	According to a 1999 memorandum documenting a conversation with a PGE employee, the Holman parking lot (directly across Water Ave) was once purportedly used to store capacitors and salvage transformers. See Q04h_PGE Hawthorne Old Transformers.pdf	See Question 4 Attachment Q04h_PGE Hawthorne Old Transformers.pdf
6. Identify any persons who concurrently with you exercises or exercised actual control or who held significant authority to control activities at each Property, including:		
b. any contractor, subcontractor, or	URS, with assistance from Cowlitz Clean Sweep (CCS) (catch basin and basement drainage system sampling 2011).	

EPA Question	Response	Records/Information Available
licensor that exercised control over any materials handling, storage, or disposal activity on the Property; (service contractors, remediation contractors, management and operator contractors, licensor providing technical support to licensed activities);		
d. utilities, pipelines, railroads and any other person with activities and/or easements regarding the Property;	The Portland Traction Co granted PGE a 90-day revocable easement through Parcel E for access to Parcel A on 22 October 1953; see the attached document (Q04a_HawthornePlat.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE did not conduct any operations on Parcel E other than to traverse the parcel. Another easement on the Hawthorne property was a one-year construction permit that PGE granted to the City of Portland in 1986 for sidewalk improvements in front of the Hawthorne Building (within Parcel A) along SE Water Avenue; see the document (Q07_1986 Sidewalk Permit.pdf) attached in response to Question 7.	See Question 4 Attachment Q04a_HawthornePlat.pdf See Question 7 Attachment Q07_1986 Sidewalk Permit.pdf
f. any person who exercised actual control over any activities or operations on the Property;	Prior to 2008, Portland Traction Company (now UPRR) exercised actual control of Parcel E as lessor to PGE. During the historical lease, Parcel E was used by PGE as a parking lot for company and employee vehicles.	
g. any person who held significant authority to control any activities or operations on the Property;	Prior to 2008, Portland Traction Company (now UPRR) exercised actual control of Parcel E.	
Section 2.0 - Owner/Operator Information (continued)		
8. If you are the current owner and/or current operator, did you acquire or operate the Property or any portion of the Property after the disposal or placement of hazardous substances, waste, or materials on, or at the Property? Describe all of the facts on which you base the answer to this question.	Furthermore, PGE contracted Hahn and Associates Inc to conduct a Phase II ESA in 2012, which included an assessment of interior building surfaces and exterior asphalt surfaces for potential presence of PCBs; evaluation of soil and groundwater beneath the property for potential releases of hazardous substances; updated asbestos survey reports; completion of a lead-based paint survey; and air sample collection and analysis for the presence of radon gas. The 2012 Phase II ESA identified the following at the Hawthorne Building: <u>Basement Area</u> PCBs • the presence of PCBs in concrete samples across the majority of the basement in	Also see Question 15 Attachments Q15_Phase II ESA Report_Hawthorne_120329.pdf

EPA Question	Response	Records/Information Available
	concentrations that ranged from 567 ug/kg to 38,600 ug/kg; • the presence of PCBs in a portion of the main floor in concentrations that ranged from 207 ug/kg to 9,872 ug/kg; • the presence of PCBs in wipe samples collected from the walls, ceilings, stairwell and floors in concentrations that ranged from non-detect (at a reporting limit of 0.1 ug/100 sq. cm) to 32.1 ug/100 sq. cm from the concrete basement floor. • the presence of PCBs in a single dust sample obtained from a small depression near the eastern boundary of the eastern parking lot with a concentration of 142.5 ug/kg. Petroleum Hydrocarbons • the presence of petroleum hydrocarbons beneath the basement floor was detected as oil-range hydrocarbons at a concentration of 3,990 mg/kg; Metals • the presence of copper in one location at 40.2 mg/kg, presence of lead in four locations ranging from 20.2 mg/kg to 240 mg/kg, presence of mercury in one location at a concentration of 0.536 mg/kg, one detection of silver at a concentration of 6.82 mg/kg, and one detection of zinc at a concentration of 122 mg/kg. <u>Eastern Parking Lot Area</u> PCBs • the presence of PCBs in the eastern parking lot asphalt in concentrations that ranged from non-detect (at a reporting limit of 8.77 ug/kg) to 103.2 ug/kg; Petroleum Hydrocarbons • the presence of diesel- and oil-range petroleum hydrocarbons in shallow fill soils beneath of the eastern parking lot area at concentrations ranging from 52 mg/kg to 8,230 mg/kg; VOCs • the presence of naphthalene beneath the eastern parking lot area at a concentration of 0.385 mg/kg; Metals • the presence of copper in at two locations at concentrations of 60.9 mg/kg and 104 mg/kg, presence of lead in three locations ranging from 127 mg/kg to 138 mg/kg, presence of mercury in three location concentrations ranging from 0.144 mg/kg to 0.388 mg/kg, presence of zinc in three locations ranging from 86.5 mg/kg to 196 mg/kg. <u>Western Parking Lot Area</u> • PCBs, petroleum hydrocarbons, VOCs and metals were non-detect in samples collected from western parking area. The 2012 Phase II ESA report (Q15_Phase II ESA Report_Hawthorne_120329.pdf) is attached in response to Question 15.	
9. At the time you acquired or operated the Property, did you know or have	Furthermore, PGE contracted Hahn and Associates Inc to conduct a Phase II ESA in 2012, which included an assessment of interior building surfaces and exterior asphalt surfaces for	Also see Question 15 Attachments Q15_Phase II ESA Report_Hawthorne_120329.pdf

EPA Question	Response	Records/Information Available
reason to know that any hazardous substance, waste, or material was disposed of on, or at the Property? Describe all investigations of the Property you undertook prior to acquiring the Property and all of the facts on which you base the answer to this question.	potential presence of PCBs; evaluation of soil and groundwater beneath the property for potential releases of hazardous substances; updated asbestos survey reports; completion of a lead-based paint survey; and air sample collection and analysis for the presence of radon gas. The 2012 Phase II ESA identified the following at the Hawthorne Building: <u>Basement Area</u> PCBs • the presence of PCBs in concrete samples across the majority of the basement in concentrations that ranged from 567 ug/kg to 38,600 ug/kg; • the presence of PCBs in a portion of the main floor in concentrations that ranged from 207 ug/kg to 9,872 ug/kg; • the presence of PCBs in wipe samples collected from the walls, ceilings, stairwell and floors in concentrations that ranged from non-detect (at a reporting limit of 0.1 ug/100 sq. cm) to 32.1 ug/100 sq. cm from the concrete basement floor. • the presence of PCBs in a single dust sample obtained from a small depression near the eastern boundary of the eastern parking lot with a concentration of 142.5 ug/kg. Petroleum Hydrocarbons • the presence of petroleum hydrocarbons beneath the basement floor was detected as oil-range hydrocarbons at a concentration of 3,990 mg/kg; Metals • the presence of copper in one location at 40.2 mg/kg, presence of lead in four locations ranging from 20.2 mg/kg to 240 mg/kg, presence of mercury in one location at a concentration of 0.536 mg/kg, one detection of silver at a concentration of 6.82 mg/kg, and one detection of zinc at a concentration of 122 mg/kg. <u>Eastern Parking Lot Area</u> PCBs • the presence of PCBs in the eastern parking lot asphalt in concentrations that ranged from non-detect (at a reporting limit of 8.77 ug/kg) to 103.2 ug/kg; Petroleum Hydrocarbons • the presence of diesel- and oil-range petroleum hydrocarbons in shallow fill soils beneath of the eastern parking lot area at concentrations ranging from 52 mg/kg to 8,230 mg/kg; VOCs • the presence of naphthalene beneath the eastern parking lot area at a concentration of 0.385 mg/kg; Metals • the presence of copper in at two locations at concentrations of 60.9 mg/kg and 104 mg/kg, presence of lead in three locations ranging from 127 mg/kg to 138 mg/kg, presence of mercury in three location concentrations ranging from 0.144 mg/kg to 0.388 mg/kg, presence of zinc in three locations ranging from 86.5 mg/kg to 196 mg/kg. <u>Western Parking Lot Area</u>	

EPA Question	Response	Records/Information Available
	• PCBs, petroleum hydrocarbons, VOCs and metals were non-detect in samples collected from western parking area. The 2012 Phase II ESA report (Q15_Phase II ESA Report_Hawthorne_120329.pdf) is attached in response to Question 15.	
10. Identify all prior owners that you are aware of for each Property identified in Response to Question 4 above. For each prior owner, further identify if known:		
a. The dates of ownership b. All evidence showing that they controlled access to the Property c. All evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at the Property during the period that they owned the Property.	Parcel E • The Phase II ESA in 2012 included an assessment of interior building surfaces and exterior asphalt surfaces for potential presence of PCBs; evaluation of soil and groundwater beneath the property for potential releases of hazardous substances; updated asbestos survey reports; completion of a lead-based paint survey; and air sample collection and analysis for the presence of radon gas. The Phase II ESA identified concrete, catch basin sediment, soil/dust and groundwater contamination (PCBs, metals, petroleum hydrocarbons and PAHs). The Phase II ESA is attached in response to Question 15.	
Section 3.0 - Description of Each Property		
13. Provide the following information about each Property identified in response to Question 4:		
i. stormwater drainage system, and sanitary sewer system, past and present, including septic tank(s) and where, when and how such systems are emptied and maintained;	The Hawthorne Building has been connected to the municipal sanitary sewer and stormwater system since the 1920s (Q05g_1996 PGE Hawthorne Memo.pdf). Interior floor drains and sumps in the building basement flow to a large sump (Sump A or Pump Sump, approximately 7 feet by 4 feet) located at the southwestern corner of the building. Prior to 1969, sanitary effluent and the discharge from the large sump within the Hawthorne Building were both discharged to the City of Portland (COP) combined sewer overflow (CSO) system. The City separated the two systems (sanitary and storm) in the area of the Hawthorne Property in approximately 1969. Additionally, in 1969, the COP requested that PGE separate its existing systems. Shortly after this request, the Hawthorne Building redirected its sanitary lines into the COP's new sanitary system. See Q13_HawthorneBuilding_Drainage Structures.pdf and Q13_Final Outfall 33 PA.pdf. In early 2011, dye tests were conducted to confirm the direction of sump and catch basin drainage to the COP stormwater and/or sanitary drainage systems. On 2 February, 2011, dye was inserted into catch basin FD-F at the base of the loading ramp. Dye was observed in Sump	See Question 5 Attachments Q05g_1996 PGE Hawthorne Memo.pdf Also see Attachments Q13_Hawthorne Source Control Invest Report.pdf Q13_HawthorneBuilding_Drainage Structures.pdf Q13_Final Outfall 33 PA.pdf

EPA Question	Response	Records/Information Available
	E, Sump A and in the sanitary manhole in the street. No dye was observed in stormwater manholes. Additionally, on 1 March, 2011, dye was inserted into Sump J and observed in Sump K, Sump I, Sump N and Sump A which is pumped to the sanitary sewer. No dye was observed in stormwater manholes. On 15 February, 2011, dye was inserted into CB-3. Dye was observed in stormwater manhole on SE Water Avenue. No dye was observed in Sump A or the sanitary sewer manholes. See Q13_Hawthorne Source Control Invest Report.pdf. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the current stormwater drainage system and the sanitary system at the Hawthorne property during PGE's ownership: **Stormwater Drainage - Parcels A and E** The majority of stormwater from the parking lot flows to four exterior catch basins (CB-1, CB-2A, CB-2B, and CB-3). Three of the exterior catch basins (CB-1, CB-2A, and CB-2B) are located in the parking lot outside the Hawthorne Building and discharge to the COP's stormwater system. The fourth catch basin (CB-3) is located on the eastside of the Hawthorne Building and drains under the Hawthorne Building to the COP's stormwater system at manhole ABU869. Upon leaving the property, stormwater is conveyed west by the COP's stormwater system to Outfall 33 which discharges within the rip-rap bank on the east side of the Willamette River. **Sanitary Discharge - Parcel A** Discharge from the Hawthorne Building's Sump A continued to flow to the COP's stormwater system until it was redirected sometime between 1969 and 1984. It now discharges to the COP's sanitary system. See Q13_HawthorneBuilding_Drainage Structures.pdf. Some stormwater reaches the building's interior by running down to a floor drain (FD-F) located at the bottom of the loading ramp just inside the garage door on the southeast side of the building. Stormwater that collects into this floor drain (FD-F) is directed to the large interior sump that historically discharged to the COP's CSO system or the COP stormwater system, and currently discharges to the COP's sanitary system.	
15. For each Property, provide all reports, information or data you have related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about each Property. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as documents containing analysis or interpretation of such data.	Asbestos surveys were conducted by PGE at the Hawthorne Building in 2011; see the attached documents (pages 430 to 441 of Q15_Phase II ESA Report_Hawthorne_120329.pdf). The 2007 Phase II ESA recommended that the catch basin solids on Parcel E should be further tested/classified, pumped and cleaned, and the content appropriately disposed; therefore: ○ In May 2010, URS collected samples from the interior drains and sumps in the Hawthorne Building basement drainage system. Seven sumps were sampled: Sump A (previously called the Pump Sump), Sump B (previously called the Dump Sump), Sump C, Sump E, and Sumps I through K; and three floor drains were sampled: FD-D, FD-F, and FD-H. See the analytical data in Table 5 and Table 6 from Q15_Hawthorne Data Report.pdf. ○ On 7 February, 2011, PGE collected samples of sediment that had adhered to the exterior of catch basin filter socks from catch basins CB-1, CB-2a, CB-2b,	Question 15 Attachments Q15_Phase II ESA Report_Hawthorne_120329.pdf Q15_May 2011 PGE Sampling Hawthorne.pdf Q15_Hawthorne Data Report.pdf Q15_Filter Liner Data Table.pdf

EPA Question	Response	Records/Information Available
	and floor drain FD-F at the time the socks were removed and replaced with new socks. All samples were tested for PCBs per EPA method 8082. Only Aroclor 1260 was detected above the method detection limit. In CB-1, Aroclor 1260 was detected at 0.0389 mg/kg. In CB-2a, Aroclor 1260 was detected at 0.194 mg/kg. In CB-2b, Aroclor 1260 was detected at 0.359 mg/kg. In FD-F, Aroclor 1260 was detected at 1.17 mg/kg. See Q15_Filter Liner Data Table.pdf. ○ On 15 February, 2011, PGE collected a sample of sediment adhered to the exterior of a catch basin filter sock from catch basin CB-3 at the time the sock was removed and replaced with a new sock. This sample was analyzed for PCBs per EPA method 8082. No Aroclors were detected above the method detection limit in this sample. See Q15_Filter Liner Data Table.pdf. ○ Based on the results of a 2011 sanitary and stormwater connection dye tests, the COP determined that sampling should be conducted to evaluate current discharges. On May 12, 2011, COP's Bureau of Environmental Services (BES) sampled solids in catch basins (CB-1 and CB-3) and two samples from Sump A (solids and water). Only Aroclor 1260 was above reporting limits for all four samples. In CB-1, Aroclor 1260 was detected at 26.5 ug/kg. In CB-3, Aroclor 1260 was detected at 107 ug/kg. In Sump A (solids), Aroclor 1260 was detected at 38,600 ug/kg (reporting limits for the Sump A solids were significantly elevated due to the high level of target analytes. The 1260 Aroclor level seen in Sump A solids requires significant dilution (400:1) to be within the calibrated range of the instrumentation). In Sump A water, Aroclor 1260 was detected at 0.228 ug/kg. See Q15_May 2011 PGE Sampling Hawthorne.pdf. On behalf of PGE, Bridgewater Group, Inc. retained Hahn and Associates, Inc. (HAI) to conduct 2012 Phase II ESA activities at the Hawthorne Building to assess concrete flooring, exterior asphalt, select interior building surfaces for the presence of PCBs; and near surface and subsurface soils and groundwater for potential releases of hazardous substances as a function of past uses and practices at the property. Field activities occurred the week of 27 June through 1 July, 2011, with additional activities occurring on 12 August and 15 August, 2011. See Q15_Phase II ESA Report_Hawthorne_120329.pdf. The 2012 Phase II ESA identified the following at the Hawthorne Building: <u>Basement Area</u> PCBs • the presence of PCBs in concrete samples across the majority of the basement in concentrations that ranged from 567 ug/kg to 38,600 ug/kg; • the presence of PCBs in a portion of the main floor in concentrations that ranged from 207 ug/kg to 9,872 ug/kg; • the presence of PCBs in wipe samples collected from the walls, ceilings, stairwell and floors in concentrations that ranged from non-detect (at a reporting limit of 0.1 ug/100 sq. cm) to 32.1 ug/100 sq. cm from the concrete basement floor. • the presence of PCBs in a single dust sample obtained from a small depression near the eastern boundary of the eastern parking lot with a concentration of 142.5 ug/kg.	

EPA Question	Response	Records/Information Available
	Petroleum Hydrocarbons • the presence of petroleum hydrocarbons beneath the basement floor was detected as oil-range hydrocarbons at a concentration of 3,990 mg/kg; Metals • the presence of copper in one location at 40.2 mg/kg, presence of lead in four locations ranging from 20.2 mg/kg to 240 mg/kg, presence of mercury in one location at a concentration of 0.536 mg/kg, one detection of silver at a concentration of 6.82 mg/kg, and one detection of zinc at a concentration of 122 mg/kg. <u>Eastern Parking Lot Area</u> PCBs • the presence of PCBs in the eastern parking lot asphalt in concentrations that ranged from non-detect (at a reporting limit of 8.77 ug/kg) to 103.2 ug/kg; Petroleum Hydrocarbons • the presence of diesel- and oil-range petroleum hydrocarbons in shallow fill soils beneath of the eastern parking lot area at concentrations ranging from 52 mg/kg to 8,230 mg/kg; VOCs • the presence of naphthalene beneath the eastern parking lot area at a concentration of 0.385 mg/kg; Metals • the presence of copper in at two locations at concentrations of 60.9 mg/kg and 104 mg/kg, presence of lead in three locations ranging from 127 mg/kg to 138 mg/kg, presence of mercury in three location concentrations ranging from 0.144 mg/kg to 0.388 mg/kg, presence of zinc in three locations ranging from 86.5 mg/kg to 196 mg/kg. <u>Western Parking Lot Area</u> • PCBs, petroleum hydrocarbons, VOCs and metals were non-detect in samples collected from western parking area.	

EPA Question	Response	Records/Information Available
16. Identify all past and present solid waste management units or areas where materials are or were in the past managed, treated, or disposed (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on each Property. For each such unit or area, provide the following information:		
a. a map showing the unit/area's boundaries and the location of all known units/areas whether currently in operation or not. This map should be drawn to scale, if possible, and clearly indicate the location and size of all past and present units/areas;	<u>Basement of the Hawthorne Building</u> • Several drains, catch basins, and sumps are located in the basement of the Hawthorne Building. These drains, catch basins, and sumps historically and currently collect wash water from equipment cleaning, metal shavings, and liquid from minor equipment spills.	
18. For each Property, provide the following information regarding any current or former sewer or storm sewer lines or combined sanitary/storm sewer lines, drains, ditches, or tributaries discharging into the Willamette River:		
a. the location and nature of each sewer line, drain, ditch, or tributary;	The Hawthorne Building has been connected to the municipal sanitary sewer and stormwater system since the 1920s (Q05g_1996 PGE Hawthorne Memo.pdf). Interior floor drains and sumps in the building basement flow to a large sump (Sump A or Pump Sump, approximately 7 feet by 4 feet) located at the southwestern corner of the building. Prior to 1969, sanitary effluent and the discharge from the large sump within the Hawthorne Building were both discharged to the City of Portland (COP) combined sewer overflow (CSO) system. The City separated the two systems (sanitary and storm) in the area of the Hawthorne Property in approximately 1969. Additionally, in 1969, the COP requested that PGE separate its existing systems. Shortly after this request, the Hawthorne Building redirected its sanitary lines into the COP's new sanitary system. See Q13_Hawthorne Building_Drainage Structures.pdf and Q13_Final Outfall 33 PA.pdf. In early 2011, dye tests were conducted to confirm the direction of sump and catch basin drainage to the COP stormwater and/or sanitary drainage systems. On 2 February, 2011, dye was inserted into catch basin FD-F at the base of the loading ramp. Dye was observed in Sump	See Question 5 Attachments Q05g_1996 PGE Hawthorne Memo.pdf See Attachments Q13_Hawthorne Source Control Invest Report.pdf Q13_HawthorneBuilding_Drainage Structures.pdf Q13_Final Outfall 33 PA.pdf

EPA Question	Response	Records/Information Available
	E, Sump A and in the sanitary manhole in the street. No dye was observed in stormwater manholes. Additionally, on 1 March, 2011, dye was inserted into Sump J and observed in Sump K, Sump I, Sump N and Sump A which is pumped to the sanitary sewer. No dye was observed in stormwater manholes. On 15 February, 2011, dye was inserted into CB-3. Dye was observed in stormwater manhole on SE Water Avenue. No dye was observed in Sump A or the sanitary sewer manholes. See Q13_Hawthorne Source Control Invest Report.pdf. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the current stormwater drainage system and the sanitary system at the Hawthorne property during PGE's ownership: **Stormwater Drainage - Parcels A and E** The majority of stormwater from the parking lot flows to four exterior catch basins (CB-1, CB-2A, CB-2B, and CB-3). Three of the exterior catch basins (CB-1, CB-2A, and CB-2B) are located in the parking lot outside the Hawthorne Building and discharge to the COP's stormwater system. The fourth catch basin (CB-3) is located on the eastside of the Hawthorne Building and drains under the Hawthorne Building to the COP's stormwater system at manhole ABU869. Upon leaving the property, stormwater is conveyed west by the COP's stormwater system to Outfall 33 which discharges within the rip-rap bank on the east side of the Willamette River. **Sanitary Discharge - Parcel A** Discharge from the Hawthorne Building's Sump A continued to flow to the COP's stormwater system until it was redirected sometime between 1969 and 1984. It now discharges to the COP's sanitary system. See Q13_Hawthorne Building_Drainage Structures.pdf. Some stormwater reaches the building's interior by running down to a floor drain (FD-F) located at the bottom of the loading ramp just inside the garage door on the southeast side of the building. Stormwater that collects into this floor drain (FD-F) is directed to the large interior sump that historically discharged to the COP's CSO system or the COP stormwater system, and currently discharges to the COP's sanitary system.	
d. whether each sewer line, drain, ditch, or tributary drained any hazardous substance, waste, material or other process residue to the Willamette River; and	The basement wash water and floor sweepings may have contained contaminants from maintenance activities including, but not limited to, metal workings and transformer repair (ceased in the mid-1980s) and storages.	
e. any documentation regarding but not limited to the following on any and all outfalls to the Willamette River which are located within the boundaries of the Property(ies). Your response should include, but not be limited to:	The exterior catch basin in the southeast corner of Parcel E discharges to the City of Portland's storm gravity main adjacent to the Hawthorne property; see the document (Q13_HawthorneBuilding_Drainage Structures.pdf).	See Question 13 Attachments Q13_HawthorneBuilding_Drainage Structures.pdf

EPA Question	Response	Records/Information Available
Section 4.0 - Respondent's Operational Activities		
21. At each Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any waste, or material? If the answer to the preceding question is anything but an unqualified "no," identify:		
a. in general terms, the nature and quantity of the waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;	Current (2006 to present) • In August 2010, PGE cleaned out the exterior catch basins and the basement drainage system. Sludge/water from the catch basins and sumps are typically removed and disposed of as needed by the PGE Water Truck Services. Water Truck Services pumps the sumps and catch basin sludge/water and disposes of it at Waste Management Inc (Troutdale, OR) along with catch basin/oil water separator sludge/water from other PGE properties.	
c. how each such waste or material was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you; and	Current Waste (2006 to present) • In August 2010, PGE cleaned out the exterior catch basins and the basement drainage system.	
41. Describe all wastes disposed by Respondent into Respondent's drains including but not limited to:	To the best of PGE's knowledge, after reasonable inquiry, the following are/were disposed of by PGE into the drains at the Hawthorne property: • Wash water from equipment cleaning into the catch basins and sumps in the Hawthorne building basement floor • Wash water from vehicle cleaning into the catch basin adjacent to the west side of the Hawthorne Building	
a. the nature and chemical composition of each type of waste;	On 13 May, 2010, with assistance from CCS, URS collected samples of solids from the exterior catch basins (CB-1, CB-2A, CB-2B, and CB-3) and analyzed for PCBs as Aroclors, petroleum hydrocarbons (NWTPH-Dx), Polychlorinated Dibenzo-p-dioxins and Furans (dioxins/furans), total PAHs (Lower Willamette Group Convention Low molecular weight PAHs [LPAHs] and high molecular weight PAHs [HPAHs]), and/or semivolatile organic compounds (SVOCs). See the analytical data in Table 5 and Table 6 from Q15_Hawthorne Data Report.pdf. Sludge/water from the catch basins and sumps are typically removed and disposed of as needed by the PGE Water Truck Services. Water Truck Services pumps the sumps and catch basin sludge/water and disposes of it at Waste Management Inc (Troutdale, OR) along with catch basin/oil water separator sludge/water from other PGE properties.	See Question 15 Attachments Q15_May 2011 PGE Sampling Hawthorne.pdf Q15_Hawthorne Data Report.pdf Q15_Filter Liner Data Table.pdf

EPA Question	Response	Records/Information Available
	On 7 February, 2011, PGE collected samples of sediment that had adhered to the exterior of catch basin filter socks from catch basins CB-1, CB-2a, CB-2b, and floor drain FD-F at the time the socks were removed and replaced with new socks. All samples were tested for PCBs per EPA method 8082. Only Aroclor 1260 was detected above the method detection limit. In CB-1, Aroclor 1260 was detected at 0.0389 mg/kg. In CB-2a, Aroclor 1260 was detected at 0.194 mg/kg. In CB-2b, Aroclor 1260 was detected at 0.359 mg/kg. In FD-F, Aroclor 1260 was detected at 1.17 mg/kg. On 15 February, 2011, PGE collected a sample of sediment adhered to the exterior of a catch basin filter sock from catch basin CB-3 at the time the sock was removed and replaced with a new sock. This sample was analyzed for PCBs per EPA method 8082. No Aroclors were detected above the method detection limit in this sample. See Q15_Filter Liner Data Table.pdf. On 12 May, 2011, COP's Bureau of Environmental Services (BES) sampled solids in catch basins (CB-1 and CB-3) and two samples from Sump A (solids and water). Only Aroclor 1260 was above reporting limits for all four samples. In CB-1, Aroclor 1260 was detected at 26.5 ug/kg. In CB-3, Aroclor 1260 was detected at 107 ug/kg. In Sump A (solids), Aroclor 1260 was detected at 38,600 ug/kg (reporting limits for the Sump A solids were significantly elevated due to the high level of target analytes. The 1260 Aroclor level seen in Sump A solids requires significant dilution (400:1) to be within the calibrated range of the instrumentation). In Sump A water, Aroclor 1260 was detected at 0.228 ug/kg. See Q15_May 2011 PGE Sampling Hawthorne.pdf.	
47. Describe any process or activity conducted on a Property identified in response to Question 4 involving the acquisition, manufacture, use, storage, handling, disposal or release or threatened release of polychlorinated biphenyl(s) ("PCB(s)" or PCB(s)-containing materials or liquids.	On 13 May, 2010, with assistance from CCS, URS collected samples of solids from the exterior catch basins (CB-1, CB-2A, CB-2B, and CB-3) and analyzed for PCBs as Aroclors, petroleum hydrocarbons (NWTPH-Dx), Polychlorinated Dibenzo-p-dioxins and Furans (dioxins/furans), total PAHs (Lower Willamette Group Convention Low molecular weight PAHs [LPAHs] and high molecular weight PAHs [HPAHs]), and/or semivolatile organic compounds (SVOCs). See the analytical data in Table 5 and Table in Q15_Hawthorne Data Report.pdf. In August 2010, the exterior catch basins and basement drainage system were also pressure washed and cleaned out, and filtration liners were added to the exterior catch basins. The filtration liners are removed and replaced with new liners every six months. On 7 February, 2011, PGE collected samples of sediment that had adhered to the exterior of catch basin filter socks from catch basins CB-1, CB-2a, CB-2b, and floor drain FD-F at the time the socks were removed and replaced with new socks. All samples were tested for PCBs per EPA method 8082. Only Aroclor 1260 was detected above the method detection limit. In CB-1, Aroclor 1260 was detected at 0.0389 mg/kg. In CB-2a, Aroclor 1260 was detected at 0.194 mg/kg. In CB-2b, Aroclor 1260 was detected at 0.359 mg/kg. In FD-F, Aroclor 1260 was detected at 1.17 mg/kg. On 15 February, 2011, PGE collected a sample of sediment adhered to the exterior of a catch basin filter sock from catch basin CB-3 at the time the sock was removed and replaced with a new sock. This sample was analyzed for PCBs per EPA method 8082. No Aroclors were detected above the method detection limit in this sample. See Q15_Filter Liner Data Table.pdf.	See Question 15 Attachment Q15_Hawthorne Data Report.pdf Q15_Filter Liner Data Table.pdf Q15_May 2011 PGE Sampling Hawthorne.pdf

EPA Question	Response	Records/Information Available
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Section 5.0 - Regulatory Information		
51. Describe all occurrences associated with violations, citations, deficiencies. and/or accidents concerning each Property during the period being investigated related to health and safety issues and/or environmental concerns. Provide copies of all documents associated with each occurrence described.	In September 1987, USEPA notified PGE of alleged violations of TSCA regulations concerning PCB recordkeeping, use authorizations, marking, storage, and disposal at multiple PGE locations, including the Hawthorne Building and Station L; see the attached document (Q51_1987-09-30 EPA to PGE_TSCA Violation.pdf). PGE settled all TSCA violations with the USEPA; see the attached documents (Q51_1988-03-28_EPA to PGE_Consent Agrmnt.pdf). Also see the attached associated documents (Q51_1987-02-04_PGE Inspection Questions.pdf, Q51_1987-02-19_PGE Inspection Notes.pdf, Q51_1987-10-29_PGE to EPA_Clarification Letter.pdf, Q51_1987-11-16_PGE_EPA Meeting Summary.pdf, Q51_1987-12-28_PGE to EPA_Info Request.pdf, and Q51_1987-1988 PGE to EPA_Phone Memos.pdf). Although not resulting in any violations, citations, deficiencies, and/or accidents, PGE also conducted the following health and safety inspections. See pages 430 to 441 of Q15_Phase II ESA Report_Hawthorne_120329.pdf).	Question 51 Attachments Q51_1987-02-04_PGE Inspection Questions.pdf Q51_1987-02-19_PGE Inspection Notes.pdf Q51_1987-09-30 EPA to PGE_TSCA Violation.pdf Q51_1987-10-29_PGE to EPA_Clarification Letter.pdf Q51_1987-11-16_PGE_EPA Meeting Summary.pdf Q51_1987-12-28_PGE to EPA_Info Request.pdf Q51_1987-1988 PGE to EPA_Phone Memos.pdf Q51_1988-03-28_EPA to PGE_Consent Agrmnt.pdf Also see Question 15 Attachments Q15_Phase II ESA Report_Hawthorne_120329.pdf
Section 6.0 - Releases and Remediation		
65. Have you ever tested the groundwater under your Property? If so, please provide copies of all data, analysis, and reports generated from such testing.	Yes. The 2007 and 2012 Phase II ESAs, which were completed by Hahn & Associates, included groundwater sampling and testing from four soil borings on the Hawthorne property; see the documents (Q15_2007 HAI Ph II ESA.pdf and pages 41 through 43 of Q15_Phase II ESA Report_Hawthorne_120329.pdf) attached in response to Question 15.	See Question 15 Attachment Q15_2007 HAI Ph II ESA.pdf Q15_Phase II ESA Report_Hawthorne_120329.pdf
66. Have you treated, pumped, or taken any kind of response action on groundwater under your Property? Unless the answer to the preceding question is anything besides an	No. Although groundwater sampling was conducted for the 2012 Phase II ESAs (see the document Q15_Phase II ESA Report_Hawthorne_120329.pdf, attached in response to Question 15), PGE has not treated, pumped, or taken any kind of response action on groundwater under the Hawthorne property.	See Question 15 Attachment Q15_Phase II ESA Report_Hawthorne_120329.pdf

EPA Question	Response	Records/Information Available
unequivocal "no", identify: a. reason for groundwater action; b. whether the groundwater contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the groundwater contained, and why the groundwater contained such constituents;		
Section 7.0 - Property Investigations		
71. Describe the purpose for, the date of initiation and completion, and the results of any investigations of soil, water (ground or surface), sediment, geology, and hydrology or air quality on or about each Property, Provide copies of all data, reports, and other documents that were generated by you or a consultant, or a federal or state regulatory agency related to the investigations that are described.	To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the known investigations and remedial activities completed at the Hawthorne property (Parcels A and E): • Asbestos surveys were conducted by PGE at the Hawthorne Building in 2011; see the documents (pages 430 to 441 of Q15_Phase II ESA Report_Hawthorne_120329.pdf). • In May 2010, URS collected samples from the interior drains and sumps in the Hawthorne Building basement drainage system. Seven sumps were sampled: Sump A (previously called the Pump Sump), Sump B (previously called the Dump Sump), Sump C, Sump E, and Sumps I through K; and three floor drains were sampled: FD-D, FD-F, and FD-H. See the analytical data in Table 5 and Table 6 from Q15_Hawthorne Data Report.pdf. • On 7 February, 2011, PGE collected samples of sediment that had adhered to the exterior of catch basin filter socks from catch basins CB-1, CB-2a, CB-2b, and floor drain FD-F at the time the socks were removed and replaced with new socks. All samples were tested for PCBs per EPA method 8082. Only Aroclor 1260 was detected above the method detection limit. In CB-1, Aroclor 1260 was detected at 0.0389 mg/kg. In CB-2a, Aroclor 1260 was detected at 0.194 mg/kg. In CB-2b, Aroclor 1260 was detected at 0.359 mg/kg. In FD-F, Aroclor 1260 was detected at 1.17 mg/kg. See Q15_Filter Liner Data Table.pdf. • On 15 February, 2011, PGE collected a sample of sediment adhered to the exterior of a catch basin filter sock from catch basin CB-3 at the time the sock was removed and replaced with a new sock. This sample was analyzed for PCBs per EPA method 8082. No Aroclors were detected above the method detection limit in this sample. See Q15_Filter Liner Data Table.pdf. • Based on the results of a 2011 sanitary and stormwater connection dye tests, the	Also see Question 15 Attachments Q15_Phase II ESA Report_Hawthorne_120329.pdf Q15_Hawthorne Data Report.pdf Q15_Filter Liner Data Table.pdf Q15_May 2011 PGE Sampling Hawthorne.pdf

EPA Question	Response	Records/Information Available
	COP determined that sampling should be conducted to evaluate current discharges. On May 12, 2011, COP's Bureau of Environmental Services (BES) sampled solids in catch basins (CB-1 and CB-3) and two samples from Sump A (solids and water). Only Aroclor 1260 was above reporting limits for all four samples. In CB-1, Aroclor 1260 was detected at 26.5 ug/kg. In CB-3, Aroclor 1260 was detected at 107 ug/kg. In Sump A (solids), Aroclor 1260 was detected at 38,600 ug/kg (reporting limits for the Sump A solids were significantly elevated due to the high level of target analytes. The 1260 Aroclor level seen in Sump A solids requires significant dilution (400:1) to be within the calibrated range of the instrumentation). In Sump A water, Aroclor 1260 was detected at 0.228 ug/kg. See Q15_May 2011 PGE Sampling Hawthorne.pdf. On behalf of PGE, Bridgewater Group, Inc. retained Hahn and Associates, Inc. (HAI) to conduct 2012 Phase II ESA activities at the Hawthorne Building to assess concrete flooring, exterior asphalt, select interior building surfaces for the presence of PCBs; and near surface and subsurface soils and groundwater for potential releases of hazardous substances as a function of past uses and practices at the property. Field activities occurred the week of 27 June through 1 July, 2011, with additional activities occurring on 12 August and 15 August, 2011. See Q15_Phase II ESA Report_Hawthorne_120329.pdf. The 2012 Phase II ESA identified the following at the Hawthorne Building: <u>Basement Area</u> PCBs • the presence of PCBs in concrete samples across the majority of the basement in concentrations that ranged from 567 ug/kg to 38,600 ug/kg; • the presence of PCBs in a portion of the main floor in concentrations that ranged from 207 ug/kg to 9,872 ug/kg; • the presence of PCBs in wipe samples collected from the walls, ceilings, stairwell and floors in concentrations that ranged from non-detect (at a reporting limit of 0.1 ug/100 sq. cm) to 32.1 ug/100 sq. cm from the concrete basement floor. • the presence of PCBs in a single dust sample obtained from a small depression near the eastern boundary of the eastern parking lot with a concentration of 142.5 ug/kg. Petroleum Hydrocarbons • the presence of petroleum hydrocarbons beneath the basement floor was detected as oil-range hydrocarbons at a concentration of 3,990 mg/kg; Metals • the presence of copper in one location at 40.2 mg/kg, presence of lead in four locations ranging from 20.2 mg/kg to 240 mg/kg, presence of mercury in one location at a concentration of 0.536 mg/kg, one detection of silver at a concentration of 6.82 mg/kg, and one detection of zinc at a concentration of 122 mg/kg. <u>Eastern Parking Lot Area</u> PCBs • the presence of PCBs in the eastern parking lot asphalt in concentrations that ranged from non-detect (at a reporting limit of 8.77 ug/kg) to 103.2 ug/kg;	

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	Petroleum Hydrocarbons • the presence of diesel- and oil-range petroleum hydrocarbons in shallow fill soils beneath of the eastern parking lot area at concentrations ranging from 52 mg/kg to 8,230 mg/kg; VOCs • the presence of naphthalene beneath the eastern parking lot area at a concentration of 0.385 mg/kg; Metals • the presence of copper in at two locations at concentrations of 60.9 mg/kg and 104 mg/kg, presence of lead in three locations ranging from 127 mg/kg to 138 mg/kg, presence of mercury in three location concentrations ranging from 0.144 mg/kg to 0.388 mg/kg, presence of zinc in three locations ranging from 86.5 mg/kg to 196 mg/kg. <u>Western Parking Lot Area</u> • PCBs, petroleum hydrocarbons, VOCs and metals were non-detect in samples collected from western parking area.	